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ABSTRACT

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DIGESTS OF PAPERS PRESENTED TO THE ADULT EDUCATION RESEARCH CONFERENCE FEBRUARY 27-28, 1970 MINNEAPOLIS

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CLEARINGHOUSE ON ADULT EDUCATION

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July 1970

FOREWORD

The ERIC Clearinghouse on Adult Education is presenting digests of the papers presented to the 11th annual Adult Education Research Conference (formerly known as the National Seminar on Adult Education Research) in Minneapolis, February 27-28, 1970, to disseminate information about the kind of adult education research carried on.

In previous years, ERIC/AE published abstracts of papers at these conferences; this year we are using digests of the papers to make this publication more useful to a greater number of people.

Twenty-seven papers were presented at the seminar, most of which are available from the ERIC Document Reproduction Service (please read carefully the note on availability and instructions for ordering on page 47); a few papers are available from other sources as noted in the citations. Readers interested in adult education research should scan regularly the two abstract journals of the ERIC system: Research in Education and Current Index to Journals in Education.

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Our thanks are due to the Executive Committee of AERC for arranging the program and providing us with these papers: Arden Grotelueschen, Chairman; Robert J. Dolan; Roy J. Ingham; Virginia R. Griffin; Allen Menlo.

Stanley M. Grabowski
Assistant Director, ERIC/AE

ONTARIO FARMERS' USE OF SELECTED TECHNICAL PUBLICATIONS.
Bell, Ian C.; Blackburn, Donald J.
10p.
EDRS Order Number: ED 036 770. Price: MF $0.25, HC $0.60

INTRODUCTION

This study sought to determine: (1) the extent of receipt, and use of three publications of the Ontario Department of Agriculture and Food[1] by farmers in Ontario; and (2) the relationship between receipt and use of publications, and selected personal and social characteristics of respondents.

Although approximately two million publications are distributed annually by the Ontario Department of Agriculture and Food, answers were not known to questions concerning receipt and effectiveness of these publications. With the existing rapid increase in agricultural technology, it is important that all forms of information dissemination to the farmers in Ontario be examined to ensure their effectiveness in making farmers aware of new ideas and practices.

PROCEDURES

Population and Sample

The data used in this study were obtained from a two percent stratified random sample of commercial and non-commercial farmers in the Province of Ontario. The sample was stratified on a county basis, with a total of 54 counties on the list. A sample was drawn by making a random start drawing a number between one and fifty, and every fiftieth name was then recorded.

This sampling procedure yielded a total of 2,068 names. Of this sample, 132 respondents were found to be non-eligible (17 dead, 35 moved, 22 sold their farms or were non-farmers, and 58 were retired) resulting in a total of 1936 eligible respondents. A response rate of slightly more than 46 percent was attained which yielded 894 usable questionnaires. Return of non-completed questionnaires accounted for somewhat less than two percent while nearly 53 percent did not respond.

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[1] These publications were: "Field Crop Recommendations for Ontario," "Guide to Chemical Weed Control" and "Dairy Husbandry in Ontario."

Survey Instrument

For the purposes of pretesting the questionnaire, a four-page questionnaire (consisting of forty questions) was mailed to a test sample of 30 farmers in one county of Ontario. The questionnaire was then refined and printed in a two-page back-to-back format. These questionnaires, together with covering letters on University of Guelph stationery and stamped return envelopes, were mailed to the sample in early May, 1969. Reminder letters were sent out ten days later and, two weeks later, a further questionnaire and letter were sent to each of approximately 1,400 farmers, who had not yet responded, in an attempt to increase the response rate.

Analysis

Data were coded, punched onto computer cards and then frequency distributions and cross-tabulations were performed through the facilities of the University of Guelph Institute of Computer Science. The dependent variables used in the cross-tabulations were (1) receipt or non-receipt of the three selected publications, and (2) the extent to which one of the publications was read. Selected personal and social characteristics of respondents comprised the 14 independent variables.

A chi-square test was used to determine whether or not a relationship existed between the variables. The .05 level of significance was selected for testing the gypotheses. A corrected coefficient of contingency was computed in order to determine the degree of association when a statistically significant relationship existed between variables.

RECEIPT AND USE OF PUBLICATIONS

One-half (51 percent) of the respondents received none of three publications included in this study. Only seven percent received all three publications. Thirty-nine percent had received a copy of "Field Crop Recommendations for Ontario;" 39 percent received "Guide to Chemical Weed Control;" and nine percent received the publication "Dairy Husbandry in Ontario."

One-half of the respondents who received "Field Crop Recommendations for Ontario" indicated that they read most of it, 68 percent said they obtained the information they desired, one-quarter felt the publication was extremely valuable, and 71 percent suggested it was easy to read. Forty-four percent of the respondents who received "Guide to Chemical Weed Control" had read most of it, 72 percent found the information for which they looked, one-third felt it was extremely valuable, and two-thirds (64 percent) indicated the publication was easy to read. Most of "Dairy Husbandry in Ontario" was read by 55 percent of respondents who received the publication, 58 percent found it contained the information they desired, one-quarter (27 percent) indicated it was extremely valuable, and two-thirds suggested it was easy to read.

A statistically significant relationship was found to exist between the number of selected publications received and the following characteristics of respondents: age, formal education, marital status, main source of income, size of farm, whether or not respondent farmed full-time, whether or not

respondent was a commercial farmer, number of agriculturally oriented meetings attended during year prior to survey, number of organizations belonged to, whether or not children were members of 4-H or Junior Farmer clubs, and district of Ontario in which respondent was raised.

No statistically significant relationships were found between the extent to which "Field Crop Recommendations for Ontario" was read and the fourteen selected characteristics of respondents.

A CONCEPTUAL SCHEMA OF THE PROGRAMMING PROCESS IN THE COMPLEX ADULT EDUCATION ORGANIZATION WITH SPECIAL EMPHASIS ON ITS SOCIOLOGICAL ASPECTS.
Boone, Edgar J.; and others.
19p.
EDRS Order Number: ED 036 767. Price: MF $0.25, HC $1.05

The objectives for this paper are:

1. To develop a conceptual definition of programming;

2. To develop a conceptual schema of the programming process in the complex adult education organization;

3. To identify and describe those aspects of the programming process that are of a sociological nature.

It has been rather clearly established that programming or decision-making is generally viewed as a rational and purposive process conducing to a conclusion. This definition, from a generic point of view, is equally as applicable to the individual(s) as it would be to social groups, whether small or large.

The ubiquitous nature of programming or decision-making occurring as it does in all phases of human endeavor suggests the need for delimiting the scope of this paper. Too, the difficult task of discussing the sociological aspects of the programming process also suggests the need for developing an appropriate frame of reference. Because of its significant role in Adult Education, the complex Adult Education organization is selected as the context within which to examine the programming or decision-making process.

Institutional organization as treated in this paper refers to a social system with purposive objectives stated in general terms of education. Within this general social system there may be, and often are, a number of subsystems whose objectives and role are interrelated and consistent with those of the general system. Programming (decision-making) occurs at different levels of the organization: at the national level, state level, county level, and even the community level. There is a need for coordination of decisions made at different levels. Several authorities in organizational and administrative theory contend that because the objectives of the general social system are the focal points around which decisions should be oriented regardless of the organizational level at which they are made, any analysis of the decision-making process must take into account the total organization.

Considerable support for this premise is reflected in the findings of several recent studies pertaining to the programming process in the complex adult education organization. These tentative findings provide considerable insight into and a useful approach to conceptualizing and understanding the programming process in the complex adult education organization. This approach makes it possible to divide the process into eight major interrelated phases. These

can be subdivided into elements. The eight phases include:

(1) formulating the organizational program framework;

(2) adapting the program framework or selected elements contained therein to the various operational levels;

(3) organizing human resources at the operational level needed to plan an educational program;

(4) planning or decision-making at the operational level;

(5) the planned program prospectus;

(6) the plan of work;

(7) implementing the plan;

(8) program accomplishments.

In a sense this is a model for planning, implementing and evaluating program decisions in an educational task-oriented organization that functions in a voluntary setting. Because of the tentativeness and exploratory nature of research conducted up to this point, these eight phases have been defined for heuristic purposes.

In order to depict the sociological aspects of programming encompassed within this model, it will be necessary to: (1) identify some of the major variables that are important to planning, implementing and evaluating program decisions; (2) indicate some of the interrelationships between these variables and (3) glean from these interrelationships some of the apparent sociological implications.

To accomplish these tasks several dependent and independent variables for each phase will be identified. Some discussion will be stated for most of the independent variables primarily in terms of considerations which need to be pointed up in terms of sociological implications. The treatment of the independent variables is meant to be suggestive as opposed to exhaustive in nature.

THE EFFECT OF ADULT BASIC EDUCATION ON SELECTED NON-COGNITIVE ATTRIBUTES.
Boyce, V. and others.
36p.
EDRS Order Number: ED 037 631. Price: MF $0.25, HC $1.90

The central problem of this study was to ascertain if participation by the functionally illiterate in an Adult Basic Education (ABE) course would elicit significant changes in selected noncognitive attributes--self-concept, anomia, and internal-external control of environment. A subsidiary problem was to determine if participants in ABE courses differed from nonparticipants on these selected attributes. The third aspect of the problem was directed toward assessing the relationship between the selected noncognitive attributes and achievement in the ABE program.

A total of 381 functional illiterates (adults with less than an eigth grade education) from nine North Carolina Community Colleges and/or Technical Institutes, 297 participants and 84 nonparticipants completed the test instruments. The subjects were given a pretest and after the ABE participants had completed approximately 60 hours of literacy instruction all subjects were given a post-test. Instruments used were: the Rotter I-E Scale, as a measure of internal-external control; the Moon-McCann Modification of the Srole Anomia Scale, as a measure of anomia; and the Tennessee Self-Concept Scale, as a measure of self-concept.

Data from the study, conducted in a 9 x 2 x 2 factorial design, were analyzed by analysis of variance. The results were:

1. ABE participants showed significant positive changes in levels of anomia from the time of the pretest to the time of the post-test; the nonparticipants did not change.

2. The nonparticipants showed significant negative changes in levels of self-concept from the time of the pretest to the time of the post-test; the participants did not change.

3. Participants, at the time of the post-test, had significantly more positive levels of anomia and self-concept than did non-participants; the two groups did not differ at the time of the pretest.

4. Data relating to internal-external control and to level of achievement were considered to be too inconsistent for hypotheses testing.

An important methodological point supported in this study was that differences between communities are a major source of variation. Such differences may distort or materially affect the interpretation of main effects and interaction effects if omitted from the factorial design.

OPTIONS FOR EVALUATION OF ADULT EDUCATION: RESEARCH OR SUBJECTIVE JUDGMENT.
Caplan, Eleanor K.
14p.
EDRS Order Number: ED 036 768. Price: MF $0.25, HC $0.80

Evaluation research is currently facing a crisis. At the same time that Federal and other funding sources are placing increasing emphasis on evaluating on-going programs, action personnel are becoming more and more skeptical about the value of such research. Evidence of this skepticism can be found at any gathering of evaluators. Put two evaluation researchers together in a room, and the conversation will inevitably turn to the "inability of action personnel to understand the needs and requirements of research," or to"appreciate what research can do for them."

Certainly, different frames of reference guide researchers and educational programers. However, in the long run, both are aiming at the same goal -- a more effective program. This suggests that there is enough common ground between researchers and programmers to provide a basis for working together, and that some adequate compromise can be struck between the needs of research and those of education programs.

What most researchers do not realize, or do not make clear to programmers, is that the programmer has a number of research options open to him. The varieties of evaluation research array themselves on a continuum from subjective, impressionistic judgments to the most rigorous experimental studies. Cost and complexity, as well as "scientific" quality rise as you move toward the experimental end of the continuum.

To the researcher, it seems self-evident that the research in which he engages should be of the best possible quality. However, he must keep in mind that the programmer must balance the objective, practical value to his program to be derived from the research against its costs in money, personnel, and program disruption. The best research from a scientific point of view may not be best for the program. And, in the long run, what is best for the program is a decision which will, and must be made by the program director.

The body of the paper will deal with the options open to evaluation in an educational program in terms of the various aspects of the program that can be evaluated and the different types and levels that are possible. The rise of methodological tools and techniques will also be discussed, pointing out weaknesses and strengths.

FAILURE IN SUCCESS; AN ASSESSMENT OF AGRICULTURAL EXTENSION IN THE UNITED STATES.
Carlson, Robert A.
10p.
EDRS Order Number: ED 036 764. Price: MF $0.25. Not available in hardcopy because of marginal legibility of original document.

The United States formalized its cooperative national support program for agricultural extension in 1914 amid Congressional hopes that these federal moneys would help to keep a large percentage of the population on the farm. To slow the run to the cities, Congress recognized that it would have to help to improve the quality of rural life to give people more inducement to remain on the farms. And it turned to agricultural extension as the means for improving the farmer's life. Congress wanted the Agricultural Extension Service to increase agricultural production so that the nation would not need to send its capital abroad simply to feed its fast-growing urban population. It also wanted Agricultural Extension to help maintain a rural way of life in the United States, a much sentimentalized pattern of living based on twentieth century notions of life on the small farms of the eighteenth and nineteenth centuries. The Cooperative Extension Service was unable to strike a balance between these two goals, emphasizing increased production to such a degree that Extension merely added a further impetus to the trend toward corporate farming. Furthermore, the existence and well-meaning efforts of Cooperative Extension lulled the small farmer into thinking that someone was taking care of his interests until it was too late for him to act. The main accomplishment of Agricultural Extension was the prevention of extensive reactionary political and mob action by farmers wishing to maintain the status quo in the nation's agriculture. This historical study will show that instead of maintaining the rural way of life to which it was dedicated the Agricultural Extension Service actually assisted in its liquidation.

PART-TIME TEACHERS OF ADULTS. AN INVESTIGATION OF THE PARTICIPATION OF ELEMENTARY AND SECONDARY SCHOOL TEACHERS IN THE PART-TIME TEACHING OF ADULTS.
Draper, James A.; Smith, M. Elizabeth.
106p.
Available from James A. Draper, Department of Adult Education, The Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 5, Ontario, Canada.

INTRODUCTION

A review of degree as well as non-degree research, particularly that pertaining to Canadian adult education, has indicated that very little research has been done relating to part-time teachers of adults. There is enough information, however, to indicate that this particular group is a proportionately large one. One need only consider the large number of such teachers employed by public school systems throughout Canada and the United States. An examination of selected school employment records indicates that upwards of 12% of the total elementary and secondary school teacher population become involved at some time in their career with the part-time teaching of adults. It was with a view to learning more about this particular group of teachers that this research study was undertaken.

The increase in the educational opportunities available to adults has been paralleled by the greater demand on teachers for developing skills in creating climates for interaction and in working with a variety of age groups. It seems that little is known about these skills or how to develop them.

PURPOSE

One of the purposes of this exploratory study was to try to establish a profile of these part-time teachers of adults who are full time employed elementary or secondary school teachers. The research study was interested in finding out why these teachers came into adult education, why they remained in adult education and whether the teachers perceived particular problems within their capacity as teachers of adults, as compared with teaching children and youth. A number of questions also attempted to identify whether there were certain kinds of interests or special needs which these people had, particularly relating to their own continuing professional education. The study attempted to relate certain variables to factors such as age, sex, length of teaching in the public school system, length of time teaching adults, courses taught, formal schooling and so on.

SOURCE AND TREATMENT OF DATA

Data were collected from part-time teachers of adults employed by two Metropolitan Toronto School Boards. Questionnaires were used for this purpose.

The data collected in the study were descriptively and statistically treated. One of the techniques of statistically treating the data was to use the optimal rating scale. (Bock, 1960).

FINDINGS/IMPLICATIONS

Findings indicate that these part-time teachers of adults know very little about the resources and literature in adult education, but that they enjoy the stimulation which comes from exposure to highly motivated adults. In their opinion, teaching adults has had an impact on their effectiveness as daytime teachers. In addition, teaching adults has influenced their own participation in continuing education.

The study provides some data of immediate practical value to those engaged in both the initial training and the continuing education of teachers. The findings of the study would seem to have important implications to teacher training colleges as well as to graduate departments of adult education. The study has been shown to be useful as a basis for hypothesis building and in providing further directions for future research.

INSTRUCTIONAL SYSTEMS FOR EXTRAMURAL COURSES.
Everly, Jack C.
11p.
EDRS Order Number: ED 036 754. Price: MF $0.25, HC $0.65

The recent introduction of a variety of instructional systems into the field of extramural instruction raises a number of problems, not the least of which is trying to evaluate the effectiveness of such systems in terms of their impact on the learner, the teacher, and the educational institutions which use them. We will review here an evaluation technique which was applied to two instructional systems being used in extramural teaching by the College of Agriculture at the University of Illinois.

The systems are: (1) UNIVEX NET which transmits audio and visual signals via telephone lines from a campus classroom to educational centers throughout the state; and (2) Auto-Tutorial carrel units which provide students with an opportunity for independent study. The evaluations are "learner" oriented. Conclusions from such investigation must be limited to a specific system. Thus, the results are not expected to be generalizable to other instructional systems, although they may be useful in evaluating the performance of other systems.

The current popularity of teacher evaluation and the availability of a proven test led to the conclusion that the Illinois Course Evaluation Questionnaire (CEQ) developed by Richard Spencer and Lawrence Aleamoni would be a logical research instrument. Attitude was measured with the CEQ while actual performance was measured by grades and specific criteria for success in obtaining educational objectives.

The 50-item CEQ is scored using a weighted point system under the assumption that students who indicate strong responses to questionnaire items should be differentiated from those whose responses tend to be more moderate. All responses to the CEQ items are based on a common scale from strongly agree (SA), through agree (A), to disagree (D), and strongly disagree (SD). There is no neutral position. A positive and negative item expressing roughly the same concept form a pair. The scoring of these items in match pairs is useful in identifying the careless student response. An example of these pairs is Item #6 "More courses should be taught this way" and Item #37 "I would prefer a different method of instruction."

In the scoring procedure the average item response is computed for each item for a given instructional system or class. The instructor's mean by item is then compared to the total results across all sections tested in the standardization population and decile norms are printed for each item mean. A total score and a set of sub-scores are also computed and presented in a computer printout. The total score is the mean response over all questionnaire items. The sub-scores are determined by factor analysis and include general course attitude, method of instruction, course content, interest and attention,

and instructors. The sub-scores represent definite areas in an instructional program that can be considered relatively independent from each other. For example, the content of a course may be rated by the students as good while the method of instruction may be considered poor.

The employment of complex instructional systems to implement extramural teaching must be accompanied by valid research efforts which can evaluate the effectiveness of such systems. Until more effective research tools can be developed, the course evaluation questionnaire (CEQ) can provide valid information about general course attitude, method of instruction, course content, interest and attention, attitude toward the instructor, and other dimensions of the instructional system. When supported by case study methods which indicate the weaknesses and strengths of the systems in specific detail, the research yields helpful insights about the instructional system studied.

PROFESSIONALIZATION IN HIGHER ADULT EDUCATION ADMINISTRATION.
Farmer, James A., Jr.
27p.
EDRS Order Number: ED 036 749. Price: MF $0.25, HC $1.45

Ninety-three higher adult education chief administrators served as subjects in this study which was designed to test whether or not there was evidence of increased professionalization between 1957 and 1967. Utilizing Hall's Professionalization Scales and some background scales to measure attitudinal and structural attributes of professionalization, an analysis of variance technique and a chi-square analysis were used to determine the difference between the extent of professionalization of three cohorts of Ss. Findings revealed no significant change over time between the three cohorts at the .05 significance level. The average scores in this study were higher than those reported in previous studies using the Professionalization Scales with other occupations.

These unexpected findings were viewed as attributable, at least in part, to characteristics of the field of higher adult education during the past decade which mitigated against further professionalization of the occupation. Using a supplementary questionnaire, additional comparisons were made between the 93 respondents and a sample of the 143 non-respondents to the initial questionnaire. The differences were not significant.

MEASURING MANAGER ATTITUDES TOWARD CONTINUING EDUCATION PROGRAMS.
Gorn, Gerald; Dubin, Samuel S.
9p.
EDRS Order Number: ED 036 762. Price: MF $0.25, HC $0.55

The attitudes of managers toward continuing education management development programs were analyzed through the use of the Fishbein technique. In comparison with the more traditional scales, this approach yields a more complete picture of the subject's attitude by revealing the underlying components of attitudes. The beliefs people have and their evaluation of these beliefs are measured separately. Then the evaluation of the belief is multiplied by the strength of the belief to get the direction of the attitude. Mathematically, this can be expressed as follows:

$$A_o = \sum_{i}^{N} B_i \, a_i$$

where A_o = the attitude toward object o

B_i = the strength of belief i about o, that is, the "probability" or "improbability" that o is associated with some other concept x_i

a_i = the evaluative aspect of B_i, that is, the evaluation of x_i

N = the number of beliefs about o, that is the number of responses in the individual's hierarchy

In a pretest on 48 managers, it was found that the Fishbein attitude technique, Osgood's semantic differential, and the Sherif's method of ordered alternatives were all highly intercorrelated. Therefore all three techniques tend to do much the same thing. The Fishbein technique was chosen for the main study since it enabled us to specify positive and negative elements in an individual's attitude. The questionnaire consisted of 20 attitude statements about management development; i.e. "increasing my job competency,""improving my ability to make decisions," etc. It was administered to 170 middle managers by instructors from the Pennsylvania State University. The subject rated each statement on an agree-disagree scale, and then on a good-bad scale for the evaluative rating. The subject was also asked for his age, level of education, and the length of time he has been a manager. The analysis of attitudes was done on the basis of these three variables.

The results showed that managers who were older, less educated, and in a managerial position for a number of years, tended to have more favorable attitudes than younger, newer and more educated managers. Generally, they also tended to have more positive beliefs and evaluations. Each instructor was able to

obtain information about the specific attitudes of managers in his particular group. For diagnostic purposes, information was obtained on the individual and the group as a whole. The advantage of this approach is that it provides a basis for understanding and changing specific attitudes in order to produce maximal attitude change.

DEVELOPING A PLACEMENT TEST FOR ADULTS IN ENGLISH-SECOND-LANGUAGE PROGRAMS IN CALIFORNIA.
Ilyin, Donna.
30p.
EDRS Order Number: ED 036 766. Price: MF $0.25, HC $1.60

I want to describe my development of EPT (English-Second-Language Placement Test) 100-200-300 which places adult students into the first three levels of English-Second-Language classes and to discuss work done on EPT 400-500-600, an experimental test to place students in the last three levels of ESL classes. EPT 100-200-300 has an overall reliability of .96 and form correlation of .93.

I believe that when a student is placed at a level where he can realistically handle material and feel that he is succeeding and learning, he will stay in a class and will become more proficient in English. A teacher can do a better job of structuring lessons, setting realistic objectives and providing a better learning climate when his students are more or less at the same level of ability.

My rationale for making structure tests was that most second-language learning materials are built around structural patterns. I made an objective multiple choice test in a written form because it was easier to make, easier to take, and because we needed short tests with simple directions that could be administered to large groups and graded quickly. My distractors (wrong answers) differed from those in the usual English multiple choice tests since they came from errors students made before learning a correct pattern orally. My tests (although in a written form) reveal what students think is correct from their oral practice.

After analyzing books used at each level of instruction, I made sample tests which were given to students at each level. By item analysis, I constructed one-page pretests which I standardized on students at Alemany Adult School. By June 1968, I had developed eight pretests (two forms for each of the first four levels) and had a bank of 300 suggested items for level five. Reliability ranged from .74 to .84 and form correlations at each level were from .76 to .86.

In 1968, I received a Federal Grant from the Southwestern Cooperative Educational Laboratory in Albuquerqe, New Mexico to make a shorter standardized test of two forms for the first three levels; to test students in smaller town and migrant areas to set realistic norms on the new standardized tests; and to finish level five and six pretests. Class levels were determined by books and materials used and referred to as 100-200-300 to avoid confusion with grade levels used for first-language learners. We also compared adult non-academic students scores with college students enrolled in English classes for the foreign born at San Francisco State College. The new standardized tests are called EPT 100-200-300 forms A and B. Each form contains 50 items, takes one-half an hour, and provides a placement table. EPT 400-500-600 is still experimental, but students successfully passing this test should be able to compete in Adult High Schools or College Foreign Born programs.

In creating the tests, I have encountered the following problems: 1) protecting the test security, 2) checking the validity, 3) administering the test where no facilities or personnel are provided. My tests will not serve as diagnostic tests nor will they place students in literacy classes. They have been used, however, to place students in junior high ESL classes.

THE EFFECT OF SOCIAL REINFORCEMENT WITH PROGRAMMED AND NON-PROGRAMMED INSTRUCTION IN IN-SERVICE INDEPENDENT STUDY BY NEWLY EMPLOYED UNIVERSITY EXTENSION STAFF.
Keske, Eldora E.
14p.
EDRS Order Number: ED 036 752. Price: MF $0.25, HC $0.80

PURPOSE

Independent or self-instructional study is being initiated as in-service training for professional University of Wisconsin Extension Community Programs staff. The primary purpose of this study was to make a comparison between social reinforcement and no social reinforcement as used with two formats of material (programmed and non-programmed instruction) to: 1) gain knowledge about the use of radio in extension teaching; and 2) improve performance in radio broadcasts. The secondary purpose was to determine: 1) when and where professional staff study self-instructional materials in on-the-job situations; and 2) their attitude towards the independent study methods.

HYPOTHESES

With regard to: 1) knowledge test scores of newly hired University Extension staff in the use of radio in extension teaching; and 2) gains in performance in radio broadcasts of newly hired University Extension staff, the following null hypotheses were tested using the planned comparisons technique:

a) There is no difference in the effects of reinforcement with programmed and non-programmed instruction.

b) There is no difference in the effects of format with and without reinforcement.

c) There are no interaction effects between format and reinforcement.

SAMPLE AND PROCEDURES

A 2 x 2 factorial design was used and 32 University Extension Community Programs staff with two years and seven months or less experience who met the criteria of making two radio broadcasts a month (or a minimum of 24 per year) were randomly assigned to four treatment groups: two receiving programmed, and two non-programmed instruction units.

A new procedure developed in the Laboratory of Experimental Design (Department of Educational Psychology, University of Wisconsin) was used to simultaneously determine sample size and alpha level. This procedure involves defining important and trivial differences as well as bounds for probability of rejection in each of these regions to establish the power curve. The

researcher can then more intelligently and accurately assess the power of the tests he will use to test hypotheses and thus correctly identify important and trivial differences. This results in decision-making for future action being more rational than when the researcher merely selects the traditional .01 or .05 Type I Error-rate to test hypotheses.

During the two weeks in which the staff used and studied the self-instructional materials on the job, positive social reinforcement was given to half of them through verbal communication and attention transmitted via three telephone calls. A knowledge test was administered two weeks after staff completed use of the materials. Each staff member selected and submitted two tapes of radio broadcasts regarded by him among his "best" -- one made prior to his use and study of the materials and another after use and study of the materials.

CONCLUSIONS

The planned comparisons made to test the hypotheses show that no significant differences exist in the resulting knowledge test scores or in gains in radio broadcast performance. Thus, the data support the hypotheses. Questions are raised relative to the positive social reinforcement administered which indicate the need for further investigation of the use of social reinforcement in educational activities of adults to determine its maximum potential for increasing the effectiveness of such education.

More in-service training should be provided professional University Extension staff by means of independent, self-instructional methods since this study shows staff react positively to such methods.

A FRAMEWORK FOR EXPLORING THE ADULT EDUCATOR'S COMMITMENT TOWARD THE CONSTRUCT OF "GUIDED LEARNING."
Landvogt, Penny L.
7p.
EDRS Order Number: ED 036 765. Price: MF $0.25 Not available in hardcopy due to marginal legibility of original document.

The concept of "guided learning" was selected to examine. Although early literature of adult education emphasized and seemed committed to guided learning, present literature appears to be negating learners' responsibility in making decisions in the curriculum development process and gives little attention to procedures for securing active involvement. Because of this trend which seems to be dissonant with some of the philosophies of adult education, there seems to be a need for bringing "guided learning" to the attention of those working in the field of adult education and researching the extent to which it is a valuable concept.

Search of the literature indicated that it was not possible simply to develop a framework for examining commitment to guided learning. The literature did not provide a sharply defined concept. It is made up of a bundle of related ideas which have not been drawn together into a precise description or framework. Therefore, the problem first was one of presenting a concept of guided learning as it applies in adult education and then one of identifying how the adult educator's commitment to it can be determined.

The framework for identifying when an adult educator is guiding learning was developed based on "philosophical patterns" which identify the basis for operationalizing the education process, and the "operational pattern" which identifies actual acts and moves on the part of the adult educator that indicate commitment to the construct of guided learning. It was developed in terms of a limited set of crucial criteria. Each criterion was then defined in terms of conditions which must be met if it is present. It was apparent that commitment to various ideas which are part of guided learning probably were not an "either, or" proposition but a matter of degree. An adult educator may be more or less committed to guided learning than he is to other teaching styles. Therefore, most of the means of measurement have been developed in the forms of a continuum.

While one of the basic purposes of this study was to develop specific testable propositions in researching the construct of guided learning, it is desirable to some degree that the material presented generates further research by having suggested ideas and even arousing disbelief in such a way as to be of both pragmatic value and heuristic influence.

FACTORS RELATED TO THE ADOPTION OF AGRICULTURAL INNOVATIONS 1962-1966.
Lanham, Orville E. and others.
17p.
EDRS Order Number: ED 036 757. Price: MF $0.25, HC $1.25

An educational program is often used to diffuse new ideas and technology, and represents an area of micro-social change. One illustration is the rapid diffusion of new farm practices in agriculture. The major purpose of this paper is to analyze the factors related to the adoption of farm practices by dairy farmers in two Pennsylvania counties in 1962 and 1966.

Data for this paper pertains to the 387 dairy farmers operating the same farms in 1962 and 1966. They were part of a larger sample of 632 that were interviewed in 1962. The research design uses time series data to analyze the factors related to adoption in 1962 and 1966. The theoretical framework suggests that modern agriculture requires the farmer to accept a new role as a scientist using rational information about farming. This is contrasted with the traditional farmer who uses "common sense" knowledge about farming.

Adoption is measured by an index of 19 farm practices. 18 independent variables were used to measure social participation, communication, personal characteristics, and structural factors of the farm operation. Multivariable analysis was used to measure the relationship between the factors and adoption of the farm practices. Hypotheses tested were: (a) the farm practice scores in one county would not be different from the other county; (b) the factors influencing adoption in 1962 would be the same in 1966; and (c) the adoption scores in 1966 would be higher than in 1962.

In 1962 the mean index score was .46, indicating that about half of the 19 practices were used. The statistical analysis indicated nine of the 18 independent variables were significantly related to the adoption index. These were: farm equipment, extension participation, farm organizations, county, self-evaluation of adoption, age, goal free of debt, household conveniences, and satisfaction with farming. The mean index score in 1966 was .57, indicating an increase of two practices. Eight of the independent variables were significantly related to the adoption index. These were: farm equipment, extension participation, farm organizations, age, county, number of "Top 20" farmers known, gross sales less than $2500, and self-evaluation of adoption.

Hypothesis (a) was rejected. Scores were different in the two counties. Hypothesis (b) was rejected. Eight variables influenced adoption in 1962, and nine in 1966. Variables which were significantly related in both years were: extension participation, age, county, participation in farm organizations, self-evaluation of adoption, and machinery index. These represented three of the four factors. Hypothesis (c) was accepted. Scores were higher in 1966.

This report suggests the importance of residence, institutions to diffuse new practices, personal characteristics of farmers, and amount of farm

machinery. The farm machinery variable accounted for most of the influence in both time periods. Institutions such as the Agricultural Extension Service and Farm Organizations play a vital role in diffusing the practices.

EVALUATION OF ATTITUDE CHANGE THROUGH CREATIVE ART AND EXPRESSION COURSES IN REMSCHEID (W. GERMANY).
Leirman, Walter
6p.
EDRS Order Number: ED 037 632. Price: MF $0.25, HC $0.40

The present abstract briefly summarizes the setup and the results of an evaluation research project carried out in the "Akademie Remscheid fur Musische Bildung und Modienerziehung," i.e., the Remscheid Academy for free creative art expression and media education. This institution, which aims at the education and training of present or future youth leaders and adult educators and in which seven trained artists instruct and animate course participants between 18 and 26 years of age, is of its kind unique in Europe.

After a pilot study in August 1968, where we used a before-after measurement technique, complemented by participant observation in each of six workgroups, the research project started with courses number 130 and 131 in April, 1969. The project will cover one year of course work. So far, three short "basic" courses (3-4 weeks) with a total of 114 participants and one "semester-course" (4 months) with 23 participants have been investigated, and the larger part of the results are available. A first extensive report titled Musische Bildung in Remscheid I. Eine Ergehnisuntersuchung, will soon be published by the Adult Education Department of the University of Leuvem (Belgium) to which the author belongs. The general design consists of what we have called an ANTE - META - POST measurement, involving Ante-Meta-Post questionnaires and a specially constructed Ante - Meta test.

Attitude change was measured through a Thurstone and Likert-type rating scale and a multiple choice question containing 20 items. These two tasks were administered without any change immediately before (ANTE), immediately after (META), and three - four months after the course (POST). Changes in attitude were tested by use of such distribution-free tests as Wilcoxcon's matched-pairs signed-rank test and the sign-test. The results were compared to those obtained from a control group on the same research instruments.

Thus far, the three "basic" courses have shown a positive change in attitude towards a progressive type of art education directly after the course (META), whereas the longer semester course showed a negative change in attitude away from the traditional, somewhat romantic concept of creative art education. However, the only POST measurement carried out on the first basic course shows no significant change when compared to the ANTE measurement. Apparently, the course effect was not strong enough to make the change permanent. The test specially constructed for our study, called TELOTEST, aimed at evaluating the change in participation goals (Gr. teles - goal) from ANTE to META through POST.

In ANTE and META, it consisted of a restricted or balanced incomplete pair-comparison design (Mosteller's X^2 test for goodness of fit was applied with good results in every case), a positive-negative preference rating (sign-test), and a goal-discussion test (t - test and analysis of variance).

In POST, where the only instrument available was a mailed questionnaire, we only used the positive-negative preference rating.

The results indicate that the goals with either high or low ANTE ratings were generally not significantly affected by the course, whereas the intermediate goals either gained or lost significance. On this test, the control group again showed almost no significant change.

Repetition of this TELOTEST in other settings, with other kinds of items, could lead to further refinement of this technique.

Full details, including tables, will be given in the paper.

INFORMATION SOURCES, DOGMATISM, AND JUDGMENTAL MODIFICATIONS.
Long, Huey B.
11p.
EDRS Order Number: ED 036 760. Price: MF $0.25, HC $0.65

This study was designed to examine the differences in the number of judgmental modifications made by Ss manifesting different levels of dogmatism when the source of information was manipulated among superior, subordinate, and peer sources.

The research design employed utilized the Ss as a control group and an experimental group. A 2 x 3 factorial analysis design was developed with data treated by an analysis of variance technique extended to the application of the Q statistic.

Rokeach's Dogmatism Scale was utilized to quantify dogmatism. Asch's Vertical Line Scale provided a quantification of judgmental modification. Status of Ss and information source was determined by the official position of the Ss within their employment group.

Thirty-six Ss were utilized in the study. Each Ss was an employee of the same state governmental agency. Eighteen Ss were placed in each dogmatism category, i.e., high or low; low dogmatic Ss scored 147 or less on Rokeach's Dogmatism Scale and high dogmatism Ss scored 163 or above on the scale. The mean dogmatism score of the high dogmatic Ss was 183.44. The mean score of the low dogmatic Ss was 124.16. The mean judgmental modification score for the high dogmatic Ss was 2.83. The mean judgmental modification score for the low dogmatic Ss was 4.44.

Findings revealed a significant difference, at the .05 level, among the judgmental modification scores according to influence source (status) and dogmatism. These findings were further treated by a factorial analysis which were interpreted to indicate that significant differences in judgmental modification consistently favored peer influence.

General tendencies suggest (1) high dogmatic Ss receiving information from a subordinate source made fewer judgmental modifications, (2) high dogmatic Ss receiving information from a peer source made more judgmental modifications, and (3) overall, more judgmental modifications were made by Ss receiving from a peer source with high dogmatic Ss making slightly more modification than low dogmatic Ss when information was from a peer source.

Recommendations for Further Research

The findings and interpretations of this study suggest the desirability of further research in the area of judgmental modifications and information source. Additional consideration of the conceptualization of "authority figures" appears desirable: for example (1) are peers recognized as an "authority figure" in the employment situation? (2) under what conditions do peers achieve "authority" status? (3) with what kinds of information do peers achieve "authority" status? and finally (4) does the relationship between dogmatism and judgmental modification vary with the nature of the information?

FUNCTIONAL PATH ANALYSIS AS A MULTIVARIATE TECHNIQUE IN DEVELOPING A THEORY OF PARTICIPATION IN ADULT EDUCATION.
Martin, James L.
14p.
EDRS Order Number: ED 036 750. Price: MF $0.25, HC $0.80

Two problems identified from the literature of adult education research are: the lack of a theoretical framework in studying problems, and limiting the statistical analysis to univariate techniques which only explore the two-variable relationships. Knox and Videbeck suggested that what is needed for studying participation is a more general theory of participation. In 1965 Gaier and White concluded, a most immediate need exists for the introduction of multivariate studies that would allow investigators to resolve systematically instead of haphazardly, many of the contradictions associated with interaction of variables. To these two limitations I have added a third; the seemingly arbitrary methods used to select variables for study. Houle has summarized the resulting inconsistencies as follows. "As to age, the picture is variable...The relationship is also ambiguous so far as sex is concerned..." Houle concluded that only level of formal education is positively related to participation in all of the studies reviewed.

This paper makes a distinction between theory verification or testing, and theory generation or development. The discussion is limited to theory development. Theory development is considered to be a process which can be divided into various phases or steps, each phase building upon the previous outcomes.

Within each of these phases multivariate statistical techniques are considered which lead to consistent theoretical arguments. In the theory building process the researcher must first define the concepts of interest and the variables used to represent each concept. The two-variable relationships must next be established to yield the initial propositions. In general, researchers have completed this phase -- and stopped. Following phase two, the variables must be theoretically ordered in a causal framework. This requires either experimental data or panel data in which the same set of variates are measured at different times. Causal ordering establishes a determinant and result for each of the initial propositions; a requisite for stabilizing the coefficients. The next step involves specifying the conditions and contingencies under which the propositions remain tenable. Steps two and three are commonly referred to in the literature as specification. Following specification the direct and indirect relations are identified among the variables. In the final phase the framework or model can be used to estimate how much a change of one unit in X will change a dependent variable Y.

This paper reports on current attempts by the author to construct a theoretical framework of adult education participation using the above described theory development process and the corresponding multivariate statistical techniques.

EFFECTIVENESS OF COOPERATIVE EXTENSION SERVICE NEWSLETTERS WITH DIFFERENT FORMATS RECEIVED BY DAIRYMEN IN PENNSYLVANIA.
Mazer, Homer F.; Brown, Emory J.
7p.
EDRS Order Number: ED 036 771. Price: MF $0.25, HC $0.45

The purpose of the study report in this paper was to measure the effectiveness of various newsletter formats in increasing knowledge among dairymen. The subject matter of the newsletter was Harvesting, Storing, and Feeding of High-Moisture Corn. The universe of study was the dairy farmers in seven counties who attended a five-week clinic relating to herd health and management. The dairymen in all counties took a pre and post test consisting of 30 multiple choice questions. The farmers in two counties served as the control group and did not receive newsletters. Four groups of dairymen selected at random in the other five counties received newsletters in one of the following formats: (1) pictorial - one letter weekly for three weeks, (2) outline - one letter weekly for three weeks, (3) conventional paragraph-one letter weekly for three weeks, and (4) pictorial - combination of three letters received at one time.

There was no significant difference in knowledge gained among dairy farmers receiving the newsletter with different formats. There was no significant difference in knowledge gained among dairymen who received three letters at weekly intervals, or who received all letters at one time. There was a significant difference between dairymen who received the letters and those who did not in that the ones who received the letter had higher knowledge scores. The younger dairymen showed a higher gain than older dairymen. Other individual variables, i.e. education, off farm employment, years of farming, and scale of farming were not related to knowledge gained.

TOWARD A THEORY OF PRACTICE IN EDUCATION WITH PARTICULAR REFERENCE TO THE EDUCATION OF ADULTS.
Mezirow, Jack
28p.
EDRS Order Number: ED 036 755. Price: MF $0.25, HC $1.50

Theorizing in adult education has been primarily concerned with questions of social philosophy which contribute little to improving the quality of professional activity. This essay suggests a rationale and strategy for developing a research-based body of theory, indigenous to adult education and of practical utility to practitioners.

Central to the reality upon which such theory must be constructed is an epistemological presupposition that an individual constructs meaning through an active process of interaction with others and directs his behavior accordingly. Educational process is an organized effort to assist the individual to construct meanings in a way by which he will be more effective in solving problems.

Mainstream research methodology has not produced a comprehensive dependable body of theory to help adult educators understand and predict behavior within the context of their programs. Efforts to link behavior to such presumed initiating or predisposing factors as motives, attitudes, role requirements, situational demands, or psychological process or organization miss the very educational process they purport to illumine. Analyses of principles, norms and rules of bureaucracy, organization and systems also have often obscured the relevant task of understanding the interaction of participants in adult education enterprises by which they come to define, interpret and react to situations in which they are involved.

Herbert Blumer has been particularly incisive in demonstrating how research methodology has distorted the reality of social interaction. The standard protocols of research lack a mechanism to correct false premises, wrongly defined problems, distorted data, concepts and false interpretations of relationships. Empirical validity of theoretical assertions is seldom established. Blumer challenges the efficacy of hypothesis testing and the practice of "operationalizing" a concept as means for establishing empirical validity.

Theory construction in educational psychology has been limited to reconstructing shards of reality and has failed to yield integrated conceptions of behavior which themselves may be tested for validity. The whole is not more than the sum of its parts, each part only dimly adumbrated by a partial description of some of its attributes. The usefulness of findings of sociological research has been even more circumscribed by its logico-deductive tradition of testing "grand" theory of established authorities in that field. Results from both research fields have been either too particularized or generalized to provide practical guidance to practitioners. Use has not been accorded the status of a major criterion in theory building and testing. A theory of practice of education would assert the primacy of utility along with validity and reliability as essential conditions of inclusion.

Glaser and Strauss have suggested a general comparative research approach useful for developing a theory of practice in adult education. This involves the systematic construction of an evolving and integrated body of inductively formulated generalizations by which the behavior of adults in educational situations may be understood and predicted. Such analysis takes the researcher into the field, free of pre-determined theoretical constraints, to construct analytical categories out of qualitative similarities and differences which emerge from study of several similar situations, such as programs of basic adult education, university extension, residential study of public affairs, community development training, great books discussion, etc. Field methods, with emphasis on participant observation, specifically oriented to theory building, are utilized to study the process of interaction over time involving staff, students, administrators and others involved. Experience of others reported in the literature is used to test and reformulate this continually emerging theory. An analytical framework for interpreting field data has been suggested by Becker, Geer and Hughes.

An integrated body of tested generalizations by which adult educators can understand and predict would have practical implications for setting research priorities according to the needs of practitioners, providing a method of research congenial to practitioners, establishing a basis for making professional judgments against a dependable body of common experience, suggest both a method and body of content relevant to graduate training in adult education and serve as a context within which program evaluation can be more defensibly undertaken.

For evaluative purposes program objectives like all ideas, ideals, or theories must be tested by the operation of acting upon them. Objectives are processual in nature. They should be dealt with as hypotheses being continually modified as a result of the process of experience. This experience is shaped by the interaction of those involved. To evaluate one must understand how participants see their situation, respond to changing problems, formulate and reformulate objectives out of experience and strive to achieve them. This insight can only be achieved by direct, continuous field involvement by the evaluator and, ideally, one equipped with dependable shared knowledge of comparative experience to guide his observations and provide a set of norms. A theory of practice would serve this purpose and would be continually refined by inputs from such evaluative effort.

CONSIDERATION OF HOW LEVELS OF ACHIEVEMENT AND ANXIETY TOWARD EDUCATION AFFECT OLDER PEOPLE'S PARTICIPATION IN ADULT EDUCATION PROGRAMS.
Norton, Paul G.
20p.
EDRS Order Number: ED 036 761. Price: MF $0.25, HC $1.10

The growing proportion of older adults in our population has necessitated increased attention to the problems of the aging. While primary attention is in the areas of health and physical needs, there is also an expanding concern of meeting the psychological needs of the elderly.

Continuing education is considered a means of assisting the elderly to make necessary psycnological adjustments to a changing society. Relatively few elderly, however, are willing to return to the classroom, since education, per se, has a negative connotation for the majority of them.

Early research indicated that as people grow older, their ability to learn declines. Later researchers, however, have considered additional variables, such as individual differences, speed, visual acuity, and levels of participation in educational programs, thus proving that age alone is of little significance in the decline of learning ability.

In an effort to pursue additional variables which affect participation in educational programs, a study of 250 residents of Quincy, Massachusetts, was conducted. The subjects were randomly selected from a population of 10,488 people over 65 years of age in that City.

This study again demonstrated the reluctance of older people to participate in a mail survey. Three months of follow-up were required to achieve the necessary population. Personal contact proved, in the final analysis, to be the most effective method of insuring participation in this study.

Two independent variables considered in this study were achievement and specific anxiety toward education. Measurement of achievement of the elderly was based on actual achievement rather than a futuristic measure of achievement motivation. Three indicators were taken into account, each measuring the highest level of achievement in occupation, income, and education. Each of these factors were ranked so that the sum total provided a lifetime achievement level.

The lack of a measure of specific anxiety toward education necessitated the development of a series of questions, which were designed to identify anxiety toward education in the areas of peer relations, deterioration of ability to learn, evaluation, and prior negative educational experiences.

The results of this study indicate that there is a correlation between levels of achievement and anxiety toward education. It can be seen that as levels of achievement increase or levels of anxiety toward education decrease, participation in adult education programs rises. Furthermore, the study reveals that there are significant sex differences in types of anxiety with males showing

a higher level of concern regarding competition than females.

Future researchers might consider major modifications to the design of this study. Correlations of achievement scores and specific anxiety toward education could be made with other instruments. For example, specific anxiety might be correlated with tests of general anxiety and depression. There is a need to identify whether free-floating anxiety focuses on education or whether education is a unique anxiety-producing experience.

ADULT EDUCATION BY MEANS OF TELEPHONE.
Peterson, Bernadine H.
7p.
EDRS Order Number: ED 036 758. Price: MF $0.25, HC $0.45

Wisconsin's Educational Telephone Network facility offers unique opportunities to reach individuals with educational programs throughout the state. This paper is a report of two such programs, directed by this writer, for adult women. One was a graduate course for home economics teachers and the other a non-credit seminar for the home economist not presently employed in a home economics occupation. The studies sought to answer these questions:

(1) Can the educational telephone be an effective means for adult education?

(2) How would these adults react to the telephone as a teaching medium?

The rapid accumlation of knowledge and tremendous pace of technological advancement multiply the problem of keeping up to date. These situations, coupled with interruption in professional pursuit experienced by many women, often create acute problems, particularly in a field as dynamic as home economics. A need exists, therefore, to utilize innovative means for helping the professional home economist keep abreast of new knowledge. The Educational Telephone Network, a private telephone network similar to a party line connecting centers throughout the state, permits instructors to take courses to students without the physical presence of the instructor in the classroom. Each center is equipped with a telephone speaker and a handset.

The graduate course, New Perspectives in Home Economics and Its Teaching, was taught to fourteen full-time home economics teachers in a center 50 miles from the central campus. For this group there was no face-to-face contact with instructors. Another section of the course was taught on the central campus with instructors present in the classroom.

The non-credit seminar, Home Economics' Role in Meeting the Challenges of Societal Change, consisted of three two-hour sessions offered over a period of three weeks. Nearly 300 home economists participated from 70 locations throughout the state.

Evaluation of the graduate course was based on pre and post tests, analysis of student participation for cognitive level achieved, achievement on written assignments, periodic student evaluation of course content and procedures, and evaluation by instructors. In general, students in the experimental group appeared to reach higher achievement levels than did the control group. That the telephone medium exerts unique demands in terms of time and attention to detail was an ever-present concern in preparing presentations.

For the non-credit seminar, a Program Evaluation Checklist, (PEC), developed by the ETN center faculty, provided for evaluation of six aspects of the series--

environment of the classroom, lecturer, effectiveness of the local convener, program content depth, program format, and technical aspects of the telephone medium. Cluster items ranging from means of 2.7 - 3.7 were considered acceptable for this program. All aspects received an overall acceptable rating.

Program format received the lowest rating. Problems centered around amount of content included in seminar sessions, time and opportunity to discuss and/or ask questions, and materials for participant reference on program structure and content. Certain mechanical aspects were sometimes reported as troublesome. Other aspects of the seminar appeared highly acceptable.

A tentative evaluation of these two adult education efforts leads to the following conclusions:

1. Ways to handle content and format for telephone courses need to be identified and implemented so that participants profit most from such educational opportunities.

2. Participants and program lecturers need preparation for mechanical aspects of such experiences.

3. Certain types of individuals appear to function more effectively with articulated media than others.

4. Visual aids enhance presentations and ease the remoteness created when the instructor is not present with students.

5. Certain skills appear to be learnable which enable individuals to increase their effectiveness when the telephone is being utilized as a teaching medium.

6. The educational telephone appears to be a useful medium for providing adult education opportunities for individuals scattered over wide geographic areas and its use should be further refined, expanded and evaluated.

FACULTY COMMITMENTS TO SELECTED ASPECTS OF CONTINUING EDUCATION.
Porter, Lee
11p.
EDRS Order Number: ED 036 759. Price: MF $0.25, HC $0.65

Problem

The literature in the field of higher adult education is so filled with statements about the low regard for continuing education among faculty members that the reader often ignores the idea as commonplace and unimportant. Since the instructional component of any educational institution is one of the major factors in determining the success of continuing education, it was decided to examine the validity of the negative claims by looking at the attitudes of faculty members. More specifically, the following purposes were established.

1. To examine the belief that university faculty members view continuing education with disfavor.

2. To examine some of the attitudinal differences among faculty members toward continuing education.

Procedures

A stratified random sample, based on department and rank, of 300 Syracuse University faculty members with the ranks of Instructor, Assistant Professor, Associate Professor and Professor were the subjects of the study. Each was sent a cover letter and a 35-item attitude questionnaire to which they responded on a continuum from "strongly agree" to "strongly disagree." In addition, biographical data such as age, sex, research experience in adult education, method of compensation, department, rank, years at Syracuse University, types of teaching experience with adults and amount of experience were also requested. Besides the initial mailing, two follow-up letters were sent out resulting in 273 returns, 243 of which were usable for the statistical treatment.

The 35 attitude statements were broken down into five categories of seven items designed to measure attitudes toward administration, students, instruction, programs and purposes. The total of the five categories was also examined.

Findings

A simple "t" test was used to shed light on the first purpose of the study. When compared with the neutral point it was found that each of the five categories was in the favorable direction at the .01 level of confidence. Based on the mean score, the purposes category was the highest followed in order by programs, students, instruction, and administration.

The two sample Hotelling T technique was used to compare attitudinal differ-

ences related to sex, research involvement, department, types of teaching and method of compensation. Females were significantly more favorable than males, and Professional School faculty were more favorable than Liberal Arts faculty, but there were no significant differences between Social Science-Humanities faculty and those of the Natural Sciences. Those who had been involved in research were more favorably disposed than those with no involvement as were those who taught in non-credit programs over strictly credit teaching. Faculty teaching on a part-of-load basis versus overload methods of compensation showed attitudinal differences in both directions among the various categories.

The one way analysis of variance method was used to compare attitudinal differences related to age, rank, experience in teaching adults, and years at Syracuse University. Instructors were more favorable than Professors and those with no teaching experience with adults reacted more favorably than faculty with various levels of experience. There were no significant differences related to age or years at Syracuse University.

PRIORITIES FOR VOCATIONAL-TECHNICAL EDUCATION RESEARCH IN NORTH CAROLINA.
Puder, William H.
North Carolina State University, Raleigh, N.C.
20p.
EDRS Order Number: ED 036 756. Price: MF $0.25, HC $1.10

This survey was conducted to establish research priorities in the field of vocational and technical education in North Carolina. Contacted by a mail questionnaire were 812 randomly selected North Carolina community college administrators, private vocational school operators, state department of education personnel and classroom teachers.

In the questionnaire, respondents were asked to assign one of four priority rankings, not knowledgeable in this area, no priority, priority, and high priority, to each of 47 potential research items categorized into six general areas: curriculum, guidance, in-service and teacher education; occupational education and manpower evaluation; and dissemination of occupational information.

Data from the study, expressed as a Composite Priority Ranking show highest research priorities were assigned to items in curriculum; ranked second was guidance research. Other categories were ranked in this order: in-service and teacher education, evaluation, occupational education and manpower, and dissemination of occupational information.

Additional priority rankings were made by respondents' job categories; by educational attainments; and by educational discipline. A priority ranking of suggested topics for research in vocational and technical education is appended to the study.

A PRELIMINARY REPORT ON THE PILOT STUDY: "THE EFFECT OF ADULT BASIC EDUCATION ON THE OCCUPATIONAL ADJUSTMENT AND ACCULTURATION OF THE LOW LITERATE ADULT."
Shearon, Ronald W.; Puder, William H.
33p.
EDRS Order Number: ED 036 751. Price: MF $ 0.25, HC $1.75

Widespread interest has been generated in Adult Basic Education as a means for helping adults adjust to the occupational, economic, educational, social, and psychological realities of living in contemporary American society. However, little attention has been given to a substantive assessment of behavioral changes associated with participation in ABE programs.

To measure such changes, a longitudinal study, over several years and in some depth, has been contemplated. The feasibility of the latter has been explored through a pilot study, the subject of this paper, which was focused on behavioral changes in adults after a 60-hour period of adult basic education, as measured by certain instruments. Examined were changes in:

1. Self-concept: Tennessee Self-concept Scale
2. Anomia: Srole's, Moon and McCann's, McClosky and Schaar's Scales
3. Achievement: Adult Basic Learning Examination
4. Attitudes toward Education, Law and Economic Conservatism: Rundquist and Sletto's Scale
5. Work Beliefs: Haller's Scale
6. Internal-External Control: Rotter's Scale

The rationale undergirding the study focuses on the concept of adjustment, a specific process of social mobility in the life of the adult basic education student; in which the individual moves from one level of adjustment to another, with the potentials he possesses, toward the achievement of his personal and family goals.

Preliminary Findings

Preliminary findings based upon an incomplete analysis of the data show:

1. That there are positive and negative changes in the self-concept of both participants and non-participants. The changes appear, at this time, to be a function of community environment.
2. That there is a decrease in the degree of anomia of participants. Some portion of the change appears attributable to community differences.

3. That gains or losses in achievement were made by participants and non-participants alike but the measuring instrument was not sufficiently precise to evaluate the extent nor direction of the achievement change.

4. That the attitudes toward education of participants significantly improved; but their attitudes toward law and economic conservatism do not appear to have improved significantly.

5. That the work beliefs of participants improved on the urban-industrial end of the scale.

6. That the internal-external control of participants improved with ABE training, but the extent of gain is not measurable at this time with current instrumentation.

7. That the potentials for socio-psychological adjustment of participants in adult basic education programs improves with participation over time, and as a function of community differences.

8. That a longitudinal study of ABE participants is feasible if the inadequacies of current instrumentation can be corrected.

Included in the report are critical comments on the strengths and weaknesses of the instrumentation employed.

SOME FACTORS AFFECTING THE PERSONAL AND PROFESSIONAL GROWTH OF TEACHERS.
Shorey, Leonard L.
23p.
EDRS Order Number: ED 036 769. Price MF $0.35, HC $1.25

The literature on continuing education is insistent on the need for the professional constantly to update his knowledge and skills. Such updating is essential in view of the rapid increase in knowledge in all professional fields.

What is true of the professional in general, is even more true of the teacher whose special responsibilities put him in constant contact with children and youth, and afford him an unequalled opportunity to influence their growth and development.

The literature suggests that continuing education for the teacher is of threefold importance. Such education assists in overcoming inadequacies in previous training; it contributes to and facilitates the updating of knowledge and skills; it increases expertise and professional competence, thus helping to maintain and improve the quality of service offered by teachers as members of a profession.

The study reported investigated from the point of view of practicing teachers: (1) the continuing education activities in which they engage; (2) the extent to which such participation is perceived as contributing to their growth as persons and as professionals; (3) the factors deemed most important in influencing their participation; (4) the kinds of help teachers perceive themselves as receiving from their involvement in these activities.

15 continuing education activities were selected for special investigation, and data were collected from public school teachers (62.9% of whom responded) employed by the Windsor School Board in Ontario, Canada.

Statistical methods used included Chi-square analysis, the Optimal Rating Scale, and Factor Analysis. Analysis of the data showed that:

1. Teacher participation in the activities investigated varied significantly when comparison was made in terms of sex, age, academic qualifications, grade level taught, and length of teaching experience.

2. Membership in Teacher Associations was rated by teachers as the most significant activity in terms of its contribution to both personal and professional development.

3. Increased skill and competence were most assisted by Observation-demonstration Lessons, Workshops, and Department of Education Courses.

4. Other activities of some significance to personal and professional growth were "Participation in Research," "Reading," "Teaching Adults," and various "Leisure Activities."

Implications for Theory and Further Research

The following findings appear to be the most important with respect to theory development and further research:

1. The inseparability of personal and professional growth and of the influences that contribute to them gives strong support to theoretical formulations about the concept education permanente, and to the emphasis which this concept places on the essential unity of personal and professional growth.

2. The findings seemed also to have some relevance to research relating to the continuing education of other professional groups, to teacher training procedures, and to research relating to teacher work patterns.

THE INTERNAL AND EXTERNAL VALIDATION OF THE CONCEPT INVOLVEMENT.
Snyder, Robert E.
18p.
EDRS Order Number: ED 036 753. Price: MF $0.25, HC $1.00

Three basic assumptions were relevant to this investigation. The first is that participant involvement in the planning and implementation of adult educational activities is consistent with democratic principles and is therefore frequently operative. Second, research whether theoretical or empirical, is a matter of clarity of central concepts and the interrelationships between concepts. Third, ambiguity surrounds the meanings of involvement and this affects its relationships to other concepts.

To provide clarity to this concept and to establish both internal and external validity for the concept, a theoretical investigation was initiated. It utilized both a philosophical technique of inquiry (linguistic analysis), and the compilation of relevant empirical research to test for generalized relationships between the concept involvement and other variables.

The linguistic analysis provided major categories of usage for the concept and a range of meanings particularly relevant to program development. Two senses of "involvement in an X" were isolated; a minimal sense--physical/mental participation, and a strong sense--an affective relationship. Ambiguity often surrounded the various uses of the concept.

A review of the literature of program development indicated more restricted uses of the concept but with both senses (minimal and strong) present. Ambiguity was also noted in these examples. This review coupled with the linguistic analysis formed the basis for determining internal or content validity.

A review of empirical research utilizing involvement as a variable revealed that the minimal sense had been widely used in postulated relationships. The minimal sense of involvement as related to: positive affective changes; desired behavioral changes; and certain ability changes; was supported by empirical evidence. The relationship between involvement (minimal sense) and greater acquisition of information was not supported. Therefore, external validity was established for certain areas of usage of the concept.

The implications are: linguistic analysis can provide assistance in explicating certain concepts,i.e., by expanding meanings; the resultant clarity can expand the range of possible relationships between concepts; it can provide a guide to the researcher in operationalizing his variables; and it can provide a basis for validating heretofore unchallenged principles operative in the field of adult education.

THE CRITERIA PROBLEM IN PROGRAM EVALUATION.
Steele, Sara M.; Moss, Gwenna M.
37p.
EDRS Order Number: ED 036 748. Price MF $0.25, HC $1.95

As a means of developing a common understanding of the nature of criteria and their role in evaluation, the first part of the paper discusses the following premises:

1. The goal of evaluation is to use program judgments in the program decision-making process. The evaluation and the criteria used must be trusted by all relevant decision-makers.

2. Evaluation is not complete unless judgment occurs. Criteria are essential to judgment.

3. Determining the type of criteria that is relevant is an important part of the process of doing evaluation. The type of criteria is determined by the (1) overall intent of the program (what kind of change is it aiming at?), (2) characteristics of the program (quality, effectiveness, etc.), and (3) stage of the programming process (design, implementation, completion) that are relevant to the decisions that need to be made.

   (The attainment of objectives cannot be determined unless criteria are used.)

4. Criteria have both a normative and a performance component and may function at various levels of specificity.

5. The rational approach to criteria formation is the most relevant in the typical program evaluation situation.

6. The effectiveness of evaluation rests primarily with the quality of the criteria used.

7. Efficiency in evaluation is determined, to a great extent, by the evaluator's competency in developing criteria that are crucial and critical to his purpose in evaluation.

The second half of the paper asserts that the major criteria problem in program evaluation is that criteria are not adequately understood and used. Reasons such as the following are suggested: (1) too narrow a concept of evaluation, (2) too great an emphasis on information, evidence, and program description, (3) the wish to avoid the decision-making involved, (4) the wish to escape challenge by avoiding subjectivity, (5) the fact that guides for interpreting data and formulating criteria have not been clearly defined in research methodology and have not been available to be transferred to program evaluation, and

(6) administrators have been more interested in descriptions of results for use externally than in systematically derived judgments to be used internally. Finally, suggestions are made as to how the understanding and use of criteria can be improved.

This paper does not present research findings. It contributes to a framework for evaluative research and suggests areas for research in the evaluation process.

EVALUATION INFERENCE APPLIED TO INSTRUCTIONAL PROGRAMMING ON AN EDUCATIONAL TELEPHONE NETWORK - A BEGINNING.
Zimmerman, Harry P.
11p.
EDRS Order Number: ED 036 763. Price: MF $0.25, HC $0.65

This research grew out of the need to provide leadership for faculty in the use of instructional media at a level which would coordinate the vast resources of University Extension and which would provide for maximum utilization of those resources.

The main purpose for conducting the study was to provide a basis for analyzing factors of a Home Economics program presented over the Wisconsin Educational Telephone Network. Specific questions to be answered were:

1. What was the populations' reaction to the total program?

2. What was the populations' reaction to the various factors?

3. What variables within the factors represented unusual strength and weakness?

The study was limited to the total population involved in one program and their immediate reaction to that program. Applying knowledge gained to new theories of programming was the real significance of the study.

Methodology used with the population of 54 participants was a combination of action research and field research. The instrument was developed around six factors: environment, content, program process, lecturer, moderator, and technical qualities of the ETN. Variables concerned with the various factors were interspersed and resulted in 48 items plus a nine point scale for an overall assessment of the program. The instrument also had a page of instructions, the rating criteria, and a page for gathering general information. A four point interval scale was used with each of the 48 variables. Thus the participant was asked to check whether an item was:

1. Not descriptive of the program they had just finished;

2. Descriptive to a minimal degree of the program they had just finished;

3. Somewhat descriptive of the program they had just finished;

4. Most descriptive of the program they had just finished.

The instrument was open ended, in that it provided a place for the participants to respond to the statement, "Suggestions for Improving this Program."

Subjective evaluative inference based on means and standard deviations indicated the overall program was somewhat better than a possible average but with room for improvement. A better approach to organization (format) and a more careful analysis of the level of content could lead to increased effectiveness. Also, the moderator should assume the role of group leader in an attempt to bring about more group interaction.

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